



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/867,363

05/29/2001

Chidambaram Krishnan

010094

5659

23696

7590

11/13/2006

QUALCOMM INCORPORATED
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER

MOORTHY, ARAVIND K

ART UNIT

PAPER NUMBER

2131

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/867,363	Applicant(s) KRISHNAN ET AL.	
	Examiner Aravind K. Moorthy	Art Unit 2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49,52-57,60-65 and 68-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-49,52-57,60-65 and 68-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is in response to the RCE filed on 7 September 2006.
2. Claims 1-49, 52-57, 60-65 and 68-73 are pending in the application.
3. Claims 1-49, 52-57, 60-65 and 68-73 have been rejected.
4. Claims 50, 51, 58, 59, 66 and 67 have been cancelled.

Continued Examination Under 37 CFR 1.114

5. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7 September 2006 has been entered.

Response to Arguments

6. Applicant's arguments with respect to claims 1-49, 52-57, 60-65 and 68-73 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-9, 16-25, 32-41 and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by Thakker et al U.S. Patent No. 6,487,425 B1.

As to claims 1, 17 and 33, Thakker et al discloses a method for controlling power to a subscriber identity module (SIM) in a wireless communication device (WCD), the method comprising:

supplying power to the SIM [column 5, lines 28-37] when a request is pending for service by the SIM [column 6, lines 28-49];

supplying power to the SIM when a software module running on the WCD requests maintenance of power to the SIM [column 6, lines 28-49]; and

terminating power to the SIM when no request is pending for service by the SIM and no software module running on the WCD requests maintenance of power to the SIM [column 7, lines 42-64].

As to claims 2, 18 and 34, Thakker et al discloses re-initiating supply of power to the SIM following termination of power to the SIM when a request from the WCD is pending for service by the SIM [column 6, lines 28-49].

As to claims 3, 19 and 35, Thakker et al discloses determining whether a request from the WCD is pending for service by the SIM by inspecting a request queue associated with the SIM [column 8, lines 47-62].

As to claims 4, 20 and 36, Thakker et al discloses re-initiating supply of power to the SIM when a software module running on the WCD requests supply of power to the SIM [column 6, lines 28-49].

As to claims 5, 21 and 37, Thakker et al discloses determining whether a software module running on the WCD requests supply of power to the SIM by polling any of a plurality of software modules running on the WCD [column 8, lines 47-62].

As to claims 7, 23 and 39, Thakker et al discloses supplying power to the SIM includes maintaining power to the SIM [column 8, lines 47-62].

As to claims 8, 24 and 40, Thakker et al discloses that the SIM includes an interface circuit that interfaces with the WCD, and terminating power to the SIM includes terminating power to the interface circuit [column 7, lines 42-64].

As to claims 9, 25 and 41, Thakker et al discloses that the SIM includes a power supply line coupled to the WCD, and terminating power to the SIM includes terminating power to the power supply line [column 7, lines 42-64].

As to claims 16, 32 and 48, Thakker et al discloses that the WCD is one of a cellular radiotelephone, a satellite radiotelephone, a PCMCIA card, and a PDA that communicates according to one of the CDMA standard, the GSM standard, and the WCDMA standard [column 4, lines 42-54].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6, 22 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thakker et al U.S. Patent No. 6,487,425 B1 as applied to claims 1, 17 and 33 above, and further in view of Deschepper et al U.S. Patent No. 6,741,848 B2.

As to claims 6, 22 and 38, Thakker et al does not teach asserting respective bits in a data structure when corresponding software modules running on the WCD request supply of power to the SIM. Thakker et al does not teach determining whether a software module running on the WCD requests supply of power to the SIM by analyzing the data structure. Thakker et al does not teach when any of the bits in the data structure is asserted, supplying power to the SIM.

Deschepper et al teaches asserting respective bits in a data structure [column 3, lines 3-20]. Deschepper et al teaches analyzing the data structure [column 3, lines 21-32].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Thakker et al so that respective bits in a data structure would have been asserted when corresponding software modules running on the WCD requested supply of power to the SIM. It would have been determined whether a software module running on the WCD requested supply of power to the SIM by analyzing the data

structure. When any of the bits in the data structure were asserted, power would have been supplied to the SIM.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Thakker et al by the teaching of Deschepper et al because it continues to increase computer system functionality as user needs evolve, modifications to existing components can be prohibitively costly and can limit backward-compatibility. To date, no one has designed a computer system to transmit more than eight bits of information on an eight-bit serial bus [column 3, lines 49-54].

9. Claims 10, 26 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thakker et al U.S. Patent No. 6,487,425 B1 as applied to claims 1, 17 and 33 above, and further in view of Eber et al U.S. Patent No. 6,595,414 B1.

As to claims 10, 26 and 42, Thakker et al teaches that the SIM includes an interface circuit that interfaces with the WCD, as discussed above.

Thakker et al does not teach that the interface circuit includes a clock input to the SIM. Thakker et al does not teach that terminating power to the SIM includes terminating power after terminating a clock signal to the clock input.

Eber et al teaches that the interface circuit that includes a clock input [column 8, lines 14-36]. Eber et al teaches terminating power includes terminating power after terminating a clock signal to the clock input [column 8, lines 14-36].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Thakker et al so that the interface circuit would have included a clock input to the removable user identity module. Power would have been

Art Unit: 2131

terminated to the SIM and included terminating power after terminating a clock signal to the clock input.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Thakker et al by the teaching of Eber et al because it limits the range over which communication is possible between the known data carrier and a write/read station adapted to cooperate with this data carrier [column 2, lines 1-24].

10. Claims 11-13, 27-29 and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thakker et al U.S. Patent No. 6,487,425 B1 in view of Barvesten, Mats Olof EP 0607767 A1 (hereinafter Barvesten).

As to claims 11-13, 27-29 and 43-45, Thakker et al teaches that the SIM is one of a removable user identification module (R-UIM) [column 5, lines 28-37] and a GSM SIM [column 5, lines 28-37].

Thakker et al does not teach storing a user access code associated with the SIM in a memory associated with the WCD in response to a user entering the access code at an initial power up of the WCD. Thakker et al does not teach retrieving the user access code from the memory when power is supplied to the SIM following the termination of power to the SIM. Thakker et al does not teach using the retrieved user access code in a security authorization process in the WCD to authorize use of secure features of the SIM. Thakker et al does not teach storing the user access code includes storing the user access code upon the termination of power to the SIM.

Barvesten teaches storing a user access code associated with the SIM in a memory associated with the WCD in response to a user entering the access code at an initial power up of

Art Unit: 2131

the WCD [pages 3 and 4]. Barvesten teaches using the retrieved user access code in a security authorization process in the WCD to authorize use of secure features of the SIM [pages 3 and 4].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Thakker et al so that a user access code (PIN) would have been associated with the SIM in a memory associated with the WCD in response to a user entering the access code at an initial power up of the WCD. The user access code would have been retrieved from the memory when power was supplied to the SIM following the termination of power to the SIM. The retrieved user access code would have been used in a security authorization process in the WCD to authorize use of secure features of the SIM. The storing of the user access code would have included storing the user access code upon the termination of power to the SIM.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Thakker et al by the teaching of Barvesten because it protects the phone and features of the SIM as well [page 2].

11. Claims 14, 15, 30, 31, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thakker et al U.S. Patent No. 6,487,425 B1 and Barvesten EP 0607767 A1 as applied to claims 1, 17 and 33 above, and further in view of Timonen et al U.S. Patent No. 6,741,848 B2.

As to claims 14, 15, 30, 31, 46 and 47, the Thakker-Barvesten combination teaches that the user access code is a personal identification number (PIN), as discussed above. Thakker et al teaches that the SIM is one of a removable user identification module (R-UIM) and a GSM SIM, as discussed above.

The Thakker-Barvesten combination does not teach that the SIM is a universal subscriber identification module (USIM).

Timonen et al teaches a SIM that is a universal subscriber identification module (USIM) [column 16, lines 14-23].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the Thakker-Barvesten combination so that the SIM would have been replaced by a universal identification module (USIM).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the Thakker-Barvesten combination by the teaching of Timonen et al because it can be used for user identification and interoperability between mobile communications systems and the GSM system [column 16, lines 14-23].

12. Claims 49, 52, 53, 55-57, 60, 61, 63-65, 68, 69 and 71-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thakker et al U.S. Patent No. 6,487,425 B1 in view of Barvesten, Mats Olof EP 0607767 A1 (hereinafter Barvesten).

As to claims 49, 52, 53, 57, 60, 61, 65, 68, 69 and 73, Thakker et al teaches that the SIM is one of a removable user identification module (R-UIM) [column 5, lines 28-37] and a GSM SIM [column 5, lines 28-37].

Thakker et al does not teach storing a user access code associated with the SIM in a memory associated with the WCD in response to a user entering the access code at an initial power up of the WCD. Thakker et al does not teach retrieving the user access code from the memory when power is supplied to the SIM following the termination of power to the SIM. Thakker et al does not teach using the retrieved user access code in a security authorization

Art Unit: 2131

process in the WCD to authorize use of secure features of the SIM. Thakker et al does not teach storing the user access code includes storing the user access code upon the termination of power to the SIM.

Barvesten teaches storing a user access code associated with the SIM in a memory associated with the WCD in response to a user entering the access code at an initial power up of the WCD [pages 3 and 4]. Barvesten teaches using the retrieved user access code in a security authorization process in the WCD to authorize use of secure features of the SIM [pages 3 and 4].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Thakker et al so that a user access code (PIN) would have been associated with the SIM in a memory associated with the WCD in response to a user entering the access code at an initial power up of the WCD. The user access code would have been retrieved from the memory when power was supplied to the SIM following the termination of power to the SIM. The retrieved user access code would have been used in a security authorization process in the WCD to authorize use of secure features of the SIM. The storing of the user access code would have included storing the user access code upon the termination of power to the SIM.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Thakker et al by the teaching of Barvesten because it protects the phone and features of the SIM as well [page 2].

As to claims 55, 63 and 71, Thakker et al teaches that the SIM is a GSM SIM [column 5, lines 28-37].

As to claims 56, 64 and 72, Thakker et al discloses that the WCD is one of a cellular radiotelephone, a satellite radiotelephone, a PCMCIA card, and a PDA that communicates according to one of the CDMA standard, the GSM standard, and the WCDMA standard [column 4, lines 42-54].

13. Claims 54, 62 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thakker et al U.S. Patent No. 6,487,425 B1 and Barvesten EP 0607767 A1 as applied to claims 49, 57 and 65 above, and further in view of Timonen et al U.S. Patent No. 6,741,848 B2.

As to claims 54, 62 and 70, the Thakker-Barvesten combination teaches that the user access code is a personal identification number (PIN), as discussed above. Thakker et al teaches that the SIM is one of a removable user identification module (R-UIM) and a GSM SIM, as discussed above.

The Thakker-Barvesten combination does not teach that the SIM is a universal subscriber identification module (USIM).

Timonen et al teaches a SIM that is a universal subscriber identification module (USIM) [column 16, lines 14-23].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the Thakker-Barvesten combination so that the SIM would have been replaced by a universal identification module (USIM).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the Thakker-Barvesten combination by the teaching of

Art Unit: 2131

Timonen et al because it can be used for user identification and interoperability between mobile communications systems and the GSM system [column 16, lines 14-23].

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aravind K. Moorthy whose telephone number is 571-272-3793. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Aravind K Moorthy
November 6, 2006

AM
Aravind K Moorthy
SYED 2-1A
PRIMARY EXAMINER
11/21/06